

28; or

- b) setting the DPS actuation point so that it matches the pressure drop created by the restrictor 22, 24 for a given flow rate.

When the restrictors 22, 24 are each embodied by a screen cut into a circle, different screen mesh densities may be used to alter the performance of the device to achieve items 1 and 2 above. Different actuation pressure setpoints for the DPSs 26, 28 may be used to alter device performance to achieve items 1 and 2 above.

IN THE CLAIMS

Please amend claims 1, 6, 11, 16, 19 and 26 as follows(attached hereto are these claims showing the changes made to each of the claims relative to those claims in the application as filed):

1. (Amended) An instrument comprising:

- (a) an enclosure³⁰ having an opening through which a fluid can flow;
- (b) first and second³² differential pressure switches; and
- (c) a sealed chamber²¹ in said opening, said chamber having an outlet and comprising:
- (i) first^(22,24) and second restrictors through which said fluid^{fm} must flow in its entirety; and
- (ii) means³⁴ for transferring the pressure in said sealed chamber to said first and second differential pressure switches, the pressure in said enclosure to said first switch and the pressure at said sealed chamber outlet to said second switch.

6. (Amended) The instrument of claim 1 wherein said first and second differential pressure switches are connected in series.

11. (Amended) A flow sensor for use in an instrument comprising:

- (a) first and second differential pressure switches;

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- A⁹ could*
- (b) a sealed chamber comprising:
 - (i) an inlet and an outlet through which a fluid must flow in its entirety;
 - (ii) a flow restrictor in said inlet and a flow restrictor in said outlet; and
 - (iii) means for transferring the pressure in said sealed chamber to said first and second differential pressure switches.
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16. (Amended) A flow sensor for use in an instrument comprising:

- A¹⁰*
- a sealed chamber comprising:
 - (i) an inlet and an outlet through which a fluid must flow in its entirety;
 - (ii) a flow restrictor in said inlet and a flow restrictor in said outlet; and
 - (iii) means for transferring the pressure in said sealed chamber to first and second differential pressure switches.
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19. (Amended) In combination:

- A¹¹*
- (A) an instrument comprising an enclosure having an opening through which a fluid can flow;
 - (B) a flow sensor comprising:
 - (i) first and second differential pressure switches; and
 - (ii) a sealed chamber in said opening, said chamber having an outlet and comprising:
 - (a) first and second restrictors through which said fluid must flow in its entirety; and
 - (b) means for transferring the pressure in said sealed chamber to said first and second differential pressure switches, the pressure in said enclosure to said first switch and the pressure at said sealed chamber outlet to said second switch.
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26. (Amended) An instrument comprising:

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(a) an enclosure having an opening through which a fluid can flow;

(b) a first pressure transducer in said enclosure and a second pressure transducer outside of said enclosure;

(c) a sealed chamber in said opening, said chamber having an outlet and comprising:

(i) first and second flow restrictors through which said fluid must flow in its entirety;

(ii) means for transferring the pressure in said sealed chamber to said first and second pressure transducers; and

(d) means connected to said first and second pressure transducers for calculating for any given rate of flow of said fluid through said sealed chamber the flow through said outlet.

Please add the following new claims:

28. A method for detecting the flow of a fluid through an enclosure having an outlet device through which said fluid can flow, said outlet device having a sealed chamber with first and second restrictors through which said fluid must flow in its entirety, said method comprising:

transferring the pressure in said sealed chamber to first and second differential pressure switches;

transferring the pressure in said enclosure to said first switch; and

transferring the pressure outside of said enclosure to said second switch.

29. A method for detecting a blockage in the outlet of a purged enclosure having an outlet monitoring device in said outlet, said outlet monitoring device having a sealed chamber with first and second restrictors through which a purging fluid must flow in its entirety, said method comprising:

flowing said purging fluid into said enclosure;

monitoring at a first differential pressure switch the difference in pressure between the pressure in said enclosure